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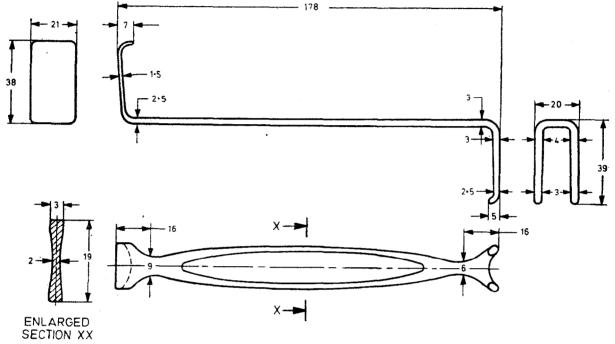




### Indian Standard

# SPECIFICATION FOR RETRACTOR, CZERNY'S PATTERN

- 1. Scope Dimensional and other requirements for Czerny's pattern retractor used in general surgery.
- 2. Shape and Dimensions As shown in Fig. 1.



All dimensions in millimetres.

FIG. 1 RETRACTOR, CZERNY'S PATTERN

- 2.1 A deviation of  $\pm 2.5$  percent shall be allowed on all dimensions.
- 3. Material Stainless steel conforming to Designation 20Cr13 or 30Cr13 of IS: 6603-1972 'Specification for stainless steel bars and flats'.

#### 4. Workmanship and Finish

- 4.1 The retractor shall be free from burrs, pits, cracks and other surface defects.
- 4.2 The edges of the blade shall be properly rounded and the retractor shall be free from sharp edges.
- 4.3 The retractor shall be polished bright and passivated.
- 5. Heat Treatment The retractor shall be hardened and tempered to give a hardness of 380 to 430 HV.

#### 6. Tests

- **6.1** Flexibility Test Hold the retractor in a suitable vice at the middle so that one end protrudes outside the vice in the downward direction. Apply a force of 250 N at the retracting end and hold it for 5 minutes.
- **6.1.1** After the test, there shall be no damage to the retractor or take a permanent set. Repeat the test on the other end on both the prongs.

Adopted 29 June 1978

O November 1978, ISI



## IS: 8854 - 1978

- **6.2** Corrosion Resistance Test Test the retractor in accordance with IS: 7531-1975 'Method for boiling and autoclaving test for corrosion resistance of stainless steel surgical instruments'. It shall show no sign of corrosion after the test.
- 7. Marking The retractor shall be legibly and indelibly marked with the manufacturer's name, initials or recognized trade-mark and the words 'Stainless Steel'. The marking shall preferably be done by electrical etching and not by stamping.
- 7.1 ISI Certification Marking Details available with the Indian Standards Institution.
- 8. Packing As agreed to between the purchaser and the supplier.